U.S. DEPARTMENT OF COMMERCE

PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO.

KCC-14,280

of_

FILING DATE

IF APPROPRIATE

TRANSLATION

NO

YES

SERIAL NO.

09/855,195

Customer No.: 3584

FORM PTO-1449 (MODIFIED)

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

USCOMM-DC 80-3985

KCC-1093

in conformance and not considered. Include copy of this form with next communication to applicant.

Customer No.:	3584	OLD E. KO				She	et <u>3</u> of	12			
FORM PTO-1449 (MODIFIED)		OCT 0 7 2004 DE U.S. DEPARTMENT OF PATENT AND TRADEM	COMMERCE ARK OFFICE	ATTY. DOCKET NO. KCC-14,280		SERIAL NO. 09/855,195					
	/3	PRIOR ART CITED BY APPLICANT		APPLICANT(S)							
LIS		PRIONANT CITED BY APPLICANT Use several sheets if necessary)		Raymond Jeffrey MAY et al.							
				FILING DATE GROUP							
				14 May 2001	0						
U.S. PATENT DOCUMENTS											
*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING D				
	AA	4,818,597	04/1989	DaPonte et al.		-					
	AB/	4,837,715	06/1989	Ungpiyakul et al.			<u> </u>				
	AC	4,867,735	09/1989	Wogelius							
•	AD	4,908,253	03/1990	Rasmussen							
	Æ	4,935,021	06/1990	Huffman et al.							
	AF	4,938,757	07/1990	Van Gompel et al.							
	AG	5,005,215	04/1991	McIlquham							
	AH 5,013,785		05/1991	Mizui				_			
	AI 5,028,646 07/			Miller et al.							
	A	5,034,008	07/1991	Breitkopf							
	AK	5,045,133	09/1991	DaPonte et al.							
		FOREIG	N PATEN	DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLA YES	NO			
pm	AL	10-075978	03/1998	JР							
m	-AM	10-165438	06/1998	JP							
	AN	EP 0 873 738	10/1998	EP		\times					
	AO	WO 98/49988	11/1998	PCT							
	AP	EP 0 888 101	01/1999	EP		\					
		OTHER PRIOR ART (In	cluding Auth	or, Title, Date, Pertinent F	Pages, Etc.)						
	AR				·						
	<u> </u>							·			
	AS										
	AT										
EXAMINER		K.m. Perde		DATE CON	SIDERED	1-11-08					
*EXAMINER	l: In e and n	itial if reference considered, whether or not ot considered. Include copy of this form wi	citation is in	conformance with MPEP nunication to applicant.	609; Draw						
						US	COMM-DC 8	D-3985			

	Customer No.:	35844	0 (1)					She	et 5 of	12		
	FORM PTO-1449 (MODIFIED)		OCT 0 7 2904 S	U.S. DEPARTMENT OF PATENT AND TRADEA	COMMERCE MARK OFFICE	ATTY. DOCKET NO. KCC-14,280		SERIAL NO. 09/855,195				
		· · · ·	THE TRADEWER	ED BY APPLICANT								
	Lis	T OF	PRIOR ART CITE Use several sheets i	ED BY APPLICANT if necessary)	Γ .	APPLICANT(S) Raymond Jeffrey MAY et al.						
						FILING DATE		GROUP				
						14 May 2001		4 733 - 3700				
				U.S.	PATENT D	OCUMENTS						
T	*EXAMINER		DOCUME	NT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING	DATE		
ž	INITIAL	\;			02/2004	0 1:43			IF APPRO	PRIATE		
ŭ		AA .		90,842	03/1994	Sasaki et al.						
z	, ,	AB		36,552	08/1994	Strack et al.						
8		AC	5,32	12,341	08/1994	Igaue et al.	<u> </u>					
P		AD	. 5,30	54,382	11/1994	Latimer et al.						
270		AE	5,37	76,430	12/1994	Swenson et al.	 			_		
€ €		AF	5,38	32,400	01/1995	Pike et al.						
		AG	5,39	99,219	03/1995	Roessler et al.						
2		AH	5,41	15,644	05/1995	Enloe			<u> </u>			
7		AJ	5,42	22,172	06/1995	Wu						
2		AJ	5,42	29,629	07/1995	Latimer et al.						
6		AK	5,47	76,458	12/1995	Glaug et al.				<u> </u>		
				FORE	GN PATENT	DOCUMENTS	,	· · · · · · · · · · · · · · · · · · ·				
			DOCUME	NT NUMBER	DATE	COUNTRY CLASS	CLASS	SUBCLASS	TRANSLATION			
		<u> </u>	DOCOME		DAIL	GOGIVITA	02.00	0000000	YES	NO		
	par	AL	woo	0/37723	06/2000	PCT						
		AM	woo	0/59429	10/2000	PCT		<u> </u>				
		AN	woo	01/00053	01/2001	PCT	ļ	X	<u> </u>			
		AO	woo	01/32116	05/2001	PCT						
	M	ΑP	woo	1/49907	07/2001	РСТ			<u> </u>			
			от	HER PRIOR ART (In	ncluding Autho	or, Title, Date, Pertinent I	Pages, Etc.)					
		AR	<u> </u>									
		-	 			· · ·						
		AS										
		$\prod_{i=1}^{m}$										
	EXAMINER		K.M.R	eichle		DATE COM	ISIDERED	1-11-0	5			
	*EXAMINER					conformance with MPEF nunication to applicant.	609; Draw	line through cita	tion if not			
	in continuanc	o ditu i	ior considered. IIICIL	no vopy or and form W	INI INDAL CONTIN			US	COMM-DC 8	0-3985		

Customer No.:	35844	0' '6				She	et 6 of	12
FORM PTO-1449 (MODIFIED)		OCT 0 7 2904 BUS. DEPARTMENT OF PATENT AND TRADEM	COMMERCE ARK OFFICE	ATTY. DOCKET NO.		SERIAL NO.		
(moon ico)	/			KCC-14,280		09/855,195		
LIS		PRIOR ART CITED BY APPLICANT	•	APPLICANT(S)				
•	(Use several sheets if necessary)		Raymond Jeffrey M	AY et al.			
•				FILING DATE		GROUP		
				14 May 2001		4793 370	D)	
		U.S.	PATENT D	OCUMENTS				
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING D	PRIATE
	AA.	5,486,166	01/1996	Bishop et al.	<u> </u>			
•	AB	5,490,846	02/1996	Ellis et al.				
	AC	5,496,298	03/1996	Kuepper et al.				
	ΑĐ	5,501,679	03/1996	Krueger et al.				
	AE	5,509,915	0471996	Hanson et al.				
	AF	5,527,300	06/1996	Sauer				
	AG	5,540,976	07/1996	Shawver et al.				
-	АН	5,543,206	08/1996	Austin et al.		/		
•	AJ	5,591,792	01/1997	Hattori et al.				
	Z	5,595,618	01/1997	Fries et al.				
. /	AK	5,614,276	03/1997	Petsetakis				
			N PATENT	DOCUMENTS				
						011001400	TRANSL	ATION
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	YES	NO
m	AL	WO 01/87214	11/2001	PCT				<u> </u>
m	. AM	WO 02/34184	05/2002	PCT		\times		
mo	AN	WO 02/060690	08/2002	PCT				
	AO				-		ļ	
	AP				<u> </u>			<u>L</u>
<u> </u>		OTHER PRIOR ART (Inc	cluding Autho	or, Title, Date, Pertinent i	Pages, Etc.)			
	AR			<u>. </u>				
	AS							
. •	АТ							
EXAMINER	•	K.M. Roeche		DATE COM	SIDERED	1-11-0	4	

	Customer No.:	35844	0125					She	et <u>7</u> of _	12		
	FORM PTO-1449	33311	OCT 0 7 2004 S. DEPARTMENT OF C	COMMERCE	ATTY. DO	CKET NO.		SERIAL NO.				
	(MODIFIED)		PATENT AND TRADEMA	ARK OFFICE	KCC-14,2			09/855,195				
١	LIS	T OF I	PRIOR ART CITED BY APPLICANT		APPLICANT(S)							
		(Use several sheets if necessary)		Raymond Jeffrey MAY et al.							
					FILING DA	TE		GROUP				
					14 May 2001 4733 3700							
			U.S. I	PATENT D	OCUMENT	<u>s</u>						
	*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NA	ME .	CLASS	SUBCLASS	FILING D			
2		AA	5,620,780	04/1997	Krueger e	et al.						
5		AB	5,663,228	09/1997	Sasaki et	al.						
		AC	5,674,216	10/1997	Buell et a	1.						
7965		AD	5,680,653	10/1997	Mathis et	al.						
2		AE	5,691,034	11/1997	Kreieger e	et al.						
JON 5, 00		AF	5,702,378	12/1997	Widlund							
کر		AG	5,707,709	01/1998	Blake							
Ĭ	, , <u>-</u>	AH	5,766,389	06/1998	Brandon	et al.						
Ĭ		Al	5,789,474	08/1998	Lu et al.							
ורפניסרו		ĹΑ.	5,800,903	09/1998	Wood et	al.						
٢		AK	5,804,021	09/1998	Abuto et	al.				\geq		
\supset			FOREIG	N PATEN	DOCUME	NTS						
				DATE		NTDV	CLASS	011001400	TRANSLATION			
		ļ	DOCUMENT NUMBER	DATE		NTRY	CLASS	SUBCLASS	YES	NO		
		AL		 -		<u></u>		<u> </u>				
ı		AM										
		AN							<u> </u>			
	•	AO	·					<u> </u>	<u> </u>			
. !		AP	OTHER PRIOR ART (Inc	Audina Auth	or Title Date	Pertinent F	Pages Etc.)		L	 		
			OTHER FRIOR ART (III)	Joung Abun	, 7100, DUIC	, · · · · · · · · · · · · · · · · · · ·	ugos, 2:0.7					
		AR										
				-				· · · · · · · · · · · · · · · · · · ·	·			
		AS			<u> </u>							
		AT						-				
	EXAMINER	<u> </u>	M Lachle		1	DATE CON	SIDERED) <i>I</i>				
	*EXAMINER	- V	M. KULLL. nitial if reference considered, whether or not	elitation le le	conformance	·			tion if not			
		e and n	ot considered. Include copy of this form with	h next comn	nunication to	applicant.			COMMA DO 8			

Customer No.:	35844		/3				She	et 8 of	12	
FORM PTO-1449 MODIFIED)		OCT 0 7 2004	DEPARTMENT	OF COMMERCE DEMARK OFFICE	ATTY. DOCKET NO.		SERIAL NO.			
,,		PRIOR ART CITE			KCC-14,280		09/855,195			
LIS	T OF F	RIOR ART CITE	BY APPLICA	NT	APPLICANT(S)					
		Jse several sheets if I			Raymond Jeffrey N	MAY et al.				
				'	FILING DATE		GROUP			
					14 May 2001 4733 3700					
			U.	S. PATENT D	OCUMENTS			· · · · · · · · · · · · · · · · · · ·		
EXAMINER INITIAL		DOCUMENT	NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING I		
	A	5,804	,286	09/1998	Quantrille et al.					
	ĄВ	5,818	,719	10/1998	Brandon et al.					
	AC	5,840	412	11/1998	Wood et al.					
•	AD	5,840	,633	11/1998	Kurihara et al.					
	AE	5,846	,232	12/1998	Serbiak et al.					
	AF	5,849	,001	12/1998	Torimae et al.					
	AG	5,856	,387	01/1999	Sasaki et al.	$\sqrt{}$				
	АН	5,860	,945	01/1999	Cramer et al.					
	Al	5,865	,933	02/1999	Morin et al.					
	AL	5,885	,656	03/1999	Goldwasser				_	
	AK	5,921	,973	07/1999	Newkirk et al.				_	
			FOR	EIGN PATENT	DOCUMENTS					
				0.77	COLINTRY	CLASS	SUBCLASS	TRANSL	ATI	
		DOCUMEN	NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	YES	<u> </u>	
	AL		<u>. </u>						╀	
· ·	AM			_					\vdash	
	AN							 	╁	
	AO AP		•	-					T	
	_ ^r	ОТН	ER PRIOR ART	(Including Autho	or, Title, Date, Pertinen	t Pages. Etc.)		.		
				(a		- 5 7 7				
	AR									
	AS									
							<u> </u>			
	AT		· · · · · · · · · · · · · · · · · · ·							
EXAMINER	,	m Re	chel		DATE OF	NSIDERED				

Customer No.:	35844	(0'' 'K)				She	et 9 of	12		
FORM PTO-1449		U.S. DEPARTMENT OF PATENT AND TRADE	F COMMERCE	ATTY, DOCKET NO.		SERIAL NO.				
(MODIFIED)	/	87	MARK OFFICE	KCC-14,280		09/855,195				
LIS	T OF I	PRIOR ART CITED BY APPLICAN	т	APPLICANT(S)						
		Use several sheets if necessary)		Raymond Jeffrey MAY et al.						
•				FILING DATE		GROUP				
				14 May 2001		1233 37	DO	-		
		U.S.	. PATENT D	OCUMENTS			-			
*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING (IF APPRO			
	A	5,930,139	07/1999	Chapdelaine et al.				/		
·	АВ	5,931,581	08/1999	Garberg et al.	ļ					
	AC	5,932,039	08/1999	Popp et al.						
•	AD	5,964,973	10/1999	Heath et al.						
	AE	5,990,377	11/1999	Chen et al.						
	AF	5,993,433	11/1999	St. Louis et al.						
<u>–</u>	AG	6,009,558	0172000	Rosch et al.						
····	АН	6,048,326	04/2000	Davis et al.						
	AI	6,066,369	05/2000	Schulz et al.						
	ΔL	6,087,550	07/2000	Anderson-Fischer et al.						
	AK	6,090,234	07/2000	Barone et al.						
		FORE	GN PATEN	DOCUMENTS	···					
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION			
- '	ļ	DOCUMENT NUMBER	DATE	COUNTRY	02.00	3000000	YES	NO		
	AL							-		
	AM		 							
	AN		 							
	AO		 							
	AP	OTHER PRIOR ART (II	neluding Autho	or Title Date Pertinent F	Pages Fir I		1	L		
		OTHER PROCESS (II	nadang Adan	or, ride, Date, I cranent	agos, Ewy					
	AR									
	AS				· ·	· <u></u> ,				
	АТ									
EXAMINER	1	(M. Reechle		DATE CON	SIDERED					
*EXAMINER	<u>, </u>	itial if reference considered, whether or no	nt citation is in		11-08	line through citat	tion if not			
		ot considered. Include copy of this form w			Jos, Diaw	008 046.				

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

USCOMM-DC 80-3985

DATE CONSIDERED

Initial If reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not

in conformance and not considered. Include copy of this form with next communication to applicant.

EXAMINER

elreally considered tell

	Customer No.:	35844	o .	8					Shee	et 12 of	12		
	FORM PTO-1449			7 2004 💆	U.S. DEPARTMENT OF PATENT AND TRADEM	COMMERCE	ATTY. DOCKET	NO.	SERIAL NO.				
	(MODIFIED)	/3			PATENT AND TRADEM	IARK OFFICE	KCC-14,280		09/855,195				
	LIS	T OF	PRIO	RAIL TART CITE	D BY APPLICANT	r	APPLICANT(S)	,					
	•	(Use se	veral sheets i	f necessary)		Raymond Jeffrey MAY et al.						
A							FILING DATE		GROUP				
3							14 May 2001	_	1753 37	0D ·			
2					U.S.	PATENT D	OCUMENTS						
3	*EXAMINER INITIAL			DOCUMEN	NT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING D IF APPROI			
cerale		M	L	6,32	9,459	12/2001	Kang et al.						
Z		AB		6,36	5,659	04/2002	Aoyama et al.						
0		AC		6,47	5,600	11/2002	Morman et al.						
\$		AD		20020	104608	08/2002	Welch et al.						
1000V		AE		20020	138063	09/2002	Kuen et al.						
ह		AF		20020	164465	11/2002	Curro et al.				_		
-		AG											
		AĤ											
		Al											
		AJ .											
		AK	<u> </u>			<u> </u>				<u> </u>			
		Γ	1		FOREIC	SN PATEN	DOCUMENTS		SUBCLASS	T			
				DOCUME	NT NUMBER	DATE	COUNTRY	CLASS		TRANSL YES	NO		
		 								TES	NO		
	·	AL AM											
		AN	 										
		AO											
		AP											
		-		OTI	IER PRIOR ART (In	cluding Autho	or, Title, Date, Perti	nent Pages, Etc.)					
						<u>.</u>							
		AR					 						
		AS			<u> </u>								
		<u>~</u>	\vdash		·····	<u> </u>							
		AT	$\vdash\vdash$										
				0 1									
	EXAMINER	<u>X.L</u>	n.	Reich	Le		DATE	CONSIDERED	1-11-0	8			
	*EXAMINER	l: Ir	nitial if r	reference cons	sidered, whether or not	t citation is in	conformance with	MPEP 609; Draw	line through cita	tion if not			
	Lin contomand	e and f	IUL CONS	NUCTEU. INCLU	de copy of this form wi	OI LISSY! COM!!	numeron to applic	unt.	US	COMM-DC 8	0-3985		

_	Customer No.:	35844	CIPE		Sheet_1_0/_						
	FORM PTO-1449 (MODIFIED)		U.S. DEP/ PATENT	ARTMENT OF COMMERCE AND TRADEMARK OFFICE	ATTY. DOCKET NO.		SERIAL NO.				
l			MON 2 8 2004 E		KCC-14,280		09/855,195				
7	LIS	T OF	PRIOR ARTS TED BY AP	PLICANT	APPLICANT(S)						
Ere	•	Y	The managed rieets if necessary	<i>(</i>)	Raymond Jeffrey MAY et al.						
Sc	1				FILING DATE		GROUP				
consid					14 May 2001		3761 370	0			
$\frac{7}{2}$				U.S. PATENT D	OCUMENTS						
coke(*EXAMINER INITIAL		DOCUMENT NUMBE	R DATE	NAME	CLASS	SUBCLASS	FILING D			
<u>.</u>		-AA	4,889,779	09/1989	Daponte						
recoly	BN	AB	4,940,464	07/1990	Van Gompel et al.	\searrow	\nearrow				
اب		AG-	4,968,313	11/1990	Sabee						
હ	m	ΑD	H1420 (Statutory Invention Re	gistration) 02/1995	Richardson	\downarrow	\sim				
5	m	AE	5,582,606	12/1996	Bruemmer et al.	\geq	\searrow				
4		-AF	5,733,822	03/1998	Gessner et al.						
- 71	- S	AG-	5,804,288	09/1998	Quantille et al.						
305	M	AH	5,883,028	03/1999	Morman et al.	\geq	\searrow				
Crus	. 1	AJ	5,906,637	05/1999	Davis et al.		\searrow				
γ		_AJ	5,952,252	09/1999	Shawver et al.	-					
2	m	AK	6,121,510	09/2000	Sauer		$\geq \leq$				
	· 			FOREIGN PATENT	ENT DOCUMENTS						
								TRANSL	ATION		
			DOCUMENT NUMBE	R DATE	COUNTRY	CLASS	SUBCLASS	YES	NO		
{		-AL	WQ-00/07729	- 00/2000 -	Pa			_0=			
		AM									
		AN									
[AO									
		AP									
Ī			OTHER PRIÓ	R ART (Including Autho	r, Title, Date, Pertinent	Pages, Etc.)					
ſ											
ı		AR		-							
				•							
		AS									
			·								
		AT									
	EXAMINER		KM. Reiche	å.	DATE CO	NSIDERED	1-11-63				
	*EXAMINER		r itial if reference considered, who ot considered. Include copy of t			P 609; Draw I	ine through citat	ion if not			

Customer No.:	35844	OIPE					Sheet 2	of 2		
FORM PTO-144 (MODIFIED)		S. DEPARTMENT OF C		ATTY. DOC KCC-14,28		SERIAL NO. 09/855,195				
LIST	OF P	RIGEARY CITED BY APPLICA se several sheets if necessary)	NT .	APPLICANT(S) Raymond Jeffrey MAY et al.						
				FILING DATE GROUP						
,				14 May 2001 3764 3700						
		U.S.	PATENT D	OCUMENTS						
*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAM	E CLASS	SUBCLASS	FILING D			
m	AA	6,248,097 B1	06/2001	Beitz et al.		\times				
, , , , , , , , , , , , , , , , , , ,	AB	6,417,121 B1	07/2002	Newkirk et al	. >	X		,		
1/	AC	6,475,600 B1	11/2002	Morman et a		X				
	AD									
	AE									
	AF									
	AG									
	АН									
	Al									
	AJ									
•	AK									
		FOREIG	N PATEN	T DOCUMEN	TS		r			
			D. T.		TRY CLASS	CLIDCI ACC	TRANSL	ATION		
		DOCUMENT NUMBER	DATE	COUNT	IRY CLASS	SUBCLASS	YES	NO		
	AL									
	АМ	.,								
	AN									
<u> </u>	AO									
	AP									
·	·	OTHER PRIOR ART (Inc	cluding Auth	or, Title, Date, I	Pertinent Pages, Etc.)					
	AR						 			
					<u> </u>					
	AS									
	AT									
EXAMINER	l	K.M. Duch		T .	OATE CONSIDERED					
CAMINER	_	- Russe	<u></u> .		1-11-08					
*EXAMINER	: Ir	itial if reference considered, whether or not	citation is in	conformance v	with MPEP 609; Draw	line through cital	ion if not			